QUALITY ASSURANCE PROVISIONS

C-321: SPECIFICATION

NSN: 9G 1615 01-140-4061

P/N: 65664-11212-041

NOMEN: Pistion, Pitck Lock

Articles to be furnished hereunder shall be manufactured, tested and inspected in accordance with drawing number (78286) 65664-11212-041 Rev. "C", or latest revision and all details and specifications referenced therein.

I. Quality/Inspection Requirements

- A. MIL-I-45208 applies:
- B. First Article Testing applies:
- C. Mandatory Inspection applies: Refer to contract section C.
- D. Production Lot Testing Applies

II. Supplemental Requirements

- A. Additionally, para. 3.1-3.5, 5.1-5.2, 6.1-6.2 of MIL-Q-9858 apply.
- B. The contractor shall identify on the process/operation sheets all manufacturing sources performing processes/operations outside of their facilities. These sheets shall not be revised or altered after the successful completion of First Articleand/or Production Lot Testing without approval from the Engineering Support Activity (ESA), via the PCO.
- C. The Inspection Method Sheets which list the characteristics of each item produced under the contract shall have serial number traceability to the raw material, casting, or forging. In addition, the contractor is responsible for providing completed inspection method sheets showing the actual dimensions taken
 - D. Markings should be in accordance with MIL-STD-130 Rev. "H" paragraph 5.3.3(a), (b),(c), and (g). Method and location shall be in accordance with the drawing.

III. Mandatory Inspection Requirements

During production, mandatory inspection is required to be accomplished by the contractor, as follows:

A. Level of Inspection (LOI):

1) Critical Characteristics: 100% inspection shall apply.

2) Major and Minor Characteristics - LOI shall be in accordance with a sampling plan acceptable to the QAR.

B. Critical Characteristics:

DRAWING 65664-11212-041 REV. "C" sheet#1

1) Zone C4

datum -B- before coating .990/.992 dia. this dimension is to have a 63 microinch surface texture, after coating I/A/W note #1 .9995/.9960 dia. this dimension is to have a 16 microinch surface texture (2 places - Dia's A & B)

2) Zone C3

1. datum -C- 1.424/1.425 dia. to be maintained concentric with datum -B- within .0005.

3) Zone C3

this dia.1.183/1.185is to be maintained concentric with datum -C- within .002 dia. this surface also must maintain a 32 microinch surface texture.

4) Zone C5

datum -A- is to be concentric to datum -B- within .0005, note #1 applies to this dia.

5) detail E

these surfaces to be free of coating overspray. Overspray on these surfaces may be removed using glass or silicone beeds.

sheet #2

no criticals

sheet #3

no criticals

sheet #4

no criticals

C. Major and Minor Characteristics:

- 1) Shall be defined by the contractor subject to QAR concurrence, unless defined on applicable drawings and associated specifications.
- IV. Unless expressly provided for elsewhere in this Clause, equipment such as fixtures, jigs, dies, patterns, templates, mylars, special tooling, test equipment, or any other manufacturing aid required for the manufacture and/or testing of the subject items will not be provided by the Government or any other source and is the sole responsibility of the Government or any other source and is the sole responsibility of the contractor. The foregoing applies notwithstanding any reference to such equipment or the furnishing thereof that may be contained in any drawing.

I-961 FIRST ARTICLE TESTS REQUIRED (Government Testing)

I. First Article Inspection/Test Criteria:

The tests to be performed under the First Article approval clause of the contract are:

- A. Dimensional Check 100 % of finished part
- B. Form / Fit
- C. Compliance with drawing, (78286) 65664-11212-041 Rev. "C", and specifications referenced therein.
- D. Review documentation as provided under DD 1423 requirements.

In addition to the above tests, the First Articles to be delivered hereunder shall also be subjected to those tests which will demonstrate that the articles comply with contract requirements. The contractor shall be responsible for providing necessary parts and repair of the First Article (s) during testing.

The contractor shall be responsible for providing necessary parts and repair of the First Article Sample (s) during testing.

II. Special Instructions:

Sample (s) may be considered as production items under the contract provided the sample(s) can be refurbished to ready for issue (RFI) condition and provided the sample(s) have inspection approval of the cognizant QAR. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.

Notification of Shipment of Material For Government Testing:

A. Fourteen (14) days prior to shipment of First Article Sample (s) the contractor shall notify the designated test facility, in writing of the antisipapated shipping date, with an information copy to the PCO, ACO, and QAR The contractor shall also arrange for preliminary inspection of test samples by the CAO/QAR.

B. Upon shipment of First Article Samples, two (2) copies of the Material Inspection and Recieving report (DD form 250), bearing the QAR's signiture and indication of preliminary inspection, shall be fowarded to the PCO / ACO and the designated test facility. The envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM".

I-964 FIRST ARTICLE APPROVAL (GOVERNMENT TESTING)

A. The contractor shall deliver two (2) units of lot / item 001 within 180 calander days from the date of this contract to the government designated facility listed below.

NAVANDEPOT CHERRY POINT Attn: Betty Lupton, code 6.3.674 PSC Box 8021 MCAS Cherry Point, NC 28533

Marking of test sample (s) shipping container:

"FOR FIRST ARTICLE TESTING. NOT FOR RFI, DO NOT TAKE UP IN STOCK". CONTRACT NUMBER:

For First Article Test, the shipping documentation shall contain this contract number and the lot/item indentification. The characteristics that the First Article must meet and the testing requirements that are specified elesewhere in this contract.

B. If the First Article is disapproved, the contractor, upon Government request, shall submit an additional First Article for testing. After each request, the contractor shall make any necessary changes, modification, or repairs to the First Article or select another First Article for testing. All costs related to these tests are to be borne by the contractor, including any and all costs for additional tests following a disapproval. The contractor shall furnish any additional First Article to the Government under the terms and conditions and within the time specified by the Government.

The government shall act of this First Article within the time limit specified in paragraph" B" above. The government reserves the right to require an equitable adjustment of the contract price for any extension of the delivery schedule or for any additional costs to the Government related to these tests.

- C. If the contractor fails to deliver any First Article on time, or the contracting officer disapproves any First Article, the contractor shall be deemed to have failed to make delivery within the meaning of the default clause of this contract.
- D. Unless otherwise provided in the contract, and if the approved First Article is not consumed or destroyed in testing, the contractor-
- 1) May deliver the approved First Article as part of the contract quantity if it meets all contract requirements for acceptance.
- 2) Shall remove and dispose of any First Article from the government test facility at the contractors expense.
- E If the Government does not act within the time specified in paragraph **B** or **C** above, the contracting officer shall, upon timely written request from the contractor, equitably adjust under

the changes clause of this contract the delivery or performance dates and/or the contract price, and any other contractual term affected by the delay.

- G. Before First Article approval, the acquisition of materials or components for, or the commencement of production of, the balance of the contract quantity is at the sole risk of the contractor. Before First Article approval, the costs thereof shall not be allocable to this contract for 1) progress payments, or 2) termination settlements if the contract is terminated for the convenience of the Government.
- H. The contractor shall produce both the First Article and the production quantity at the same facility and shall submit a certification to this effect with each First Article.
- I. The contractor shall provide specific written notification to the procuring contractor officer informing him/her of the shipment of any articles furnished in accordance with this clause. Such notification must be addressed to the attention of the ACO with copies to NAVICP 072 and to the testing activity. Failure to provide such notification shall excuse the government from any delay in performing First Article Testing and informing the contractor of the sesults thereof.

C-330 PRODUCTION LOT TESTING REQUIREMENTS

The material produced under contract shall be accepted by the cognizant CAO/QAR upon the successful completion of these requirements.

I. Production Lot Test Requirements

- A. The cognizant CAO/QAR shall select two (2) item (s) at random from the production lot. In addition the QAR shall select one (1) item (s) at random from each successive lot or portion thereof.
 - B. Production Lot Testing to be completed during production after First Article Approval.
 - C. Sample (s) are to be unpainted. Corrosive areas to be coated with a light preservative.
- II. The tests to be performed under the Production Lot Sample testing provisions of the contract are:
- A. Compliance with drawing (78286) 65664-11212-041 rev. "C" and all specification referenced therein.
 - B. Dimensional Check

In addition to the above tests, the Production Lot Sample(s) to be delivered hereunder shall also be subjected to those tests which will demonstrate that the sample(s) comply with contract requirements.

III. Testing location

- A. Ship sample(s)/data to NAVENDEPOT Cherry Point, POC: Betty Lupton, code 6.3.674
- B. Shipping container marking: NON RFI

Within fifteen (15) days of completion of Production Lot Testing the CAO/QAR shall prepare and submit two (2) copies of their test report with conclusions and recommendations to the Contracting Officer.

Shipment and Distribution of Sample(s):

- A. Fourteen (14) days prior to shipment of Production Lot Sample (s) the contractor shall notify the designated test facility, in writing of the antisipapated shipping date, with an information copy to the PCO, ACO, and QAR The contractor shall also arrange for preliminary inspection of test samples by the CAO/QAR.
- B. Upon shipment of Production Lot Samples, two (2) copies of the Material Inspection and Recieving report (DD form 250), bearing the QAR's signiture and indication of preliminary

inspection, shall be fowarded to the PCO / ACO and the designated test facility. The envelopes shall be clearly marked, "DO NOT OPEN IN MAILROOM".

- C. Sample(s) may be considered as production items under the contract provided sample(s) can be refurbished to ready For Issue (RFI) condition and provided sample(s) have inspection approval of the cognizant DCMAO. Sample(s) may be shipped as production items only after all other units required under the contract have been produced and are ready for shipment.
- D. Sample(s) will be returned to the contractor.
- E. The designated test facility and the contracting officer shall be notified as to all shipping data applicable to the sample(s), such as bill of lading number, method of shipment, etc...14 days prior to shipping.

C-331 PRODUCTION LOT TESTING (GOVERNMENT TESTING)

A. The Production Lot Samples shall be:

1.Selected at random by the cognizant government QAR. Such sample(s) shall be submitted via the cognizant government inspector, all transportation charges prepaid by the contractor to:

NAVANDEPOT CHERRY POINT Attn: Betty Lupton, code 6.3.674 PSC Box 8021 MCAS Cherry Point, NC 28533

2. The samples shall be identified by contract number, lot number, and be clearly marked as follows:

PRODUCTION LOT TEST SAMPLES NOT R.F.I. MATERIAL DO NOT TAKE UP IN STOCK

- B. Such samples shall be delivered to the testing facility in sufficient time prior to the delivery date of the production articles to allow a 60 day period for testing and written notification by the contracting officer of the approval or disapproval of the samples. Within 90 days of the reciept of the samples, the testing facility shall notify contracting officer, PCO /ACO of the results of the testing, together with the recommendation for approval or disapproval.
- C. In the event the contractor does not receive written notification of approval or disapproal of the samples for a particular lot within 60 days from their submission for such testing, the contract delievery schedle shall be equitably adjusted as necessary.
- D. If the contractor fails to deliver any Production Lot Samples for testing within the time or times specified, or if the contracting officer disapproves any Production Lot Samples, the contractor shall be deemed to have failed to make delievery within the meaning of the default clause of this contract, and this contract shall be subject to termination for default.
- E. In order for a Production Lot to be acceptable, all samples representative of the lot must pass all the contract requirements. In the event a sample fails to pass such requirements, the lot will be rejected. In such event, the government may, at its option and at no additional cost to the government, (I) terminate all or any porition of this contract for default, (II) require the manufacture of a new Production Lot, or a rework of the rejected Production Lot if the means and procedures by the contractor for rework are acceptable to the government, or (III) require the submission of additional samples for test. The foregoing procedures shall apply to new or reworked Production Lots in the same way as they did to the original Production Lot.

CONTRACT DATA REQUIREMENTS LIST

FORM APPROVED OMB NO. 0704-0188

PUBLIC REPORTING BURDEN FOR THIS COLLECTION OF INFORMATION IS ESTIMATED TO AVERAGE 440 HOURS PER RESPONSE, INCLUDING THE TIME FOR REVIEWING INSTRUCTIONS, SEARCHING EXISTING DATA SOURCES., GATHERING AND MAINTAINING THE DATA NEEDED AND COMPLETING AND REVIEWING THE COLLECTION OF INFORMATION. SEND COMMENTS REGARDING THIS BURDEN ESTIMATE OR ANY OTHER ASPECT OF THIS COLLECTION OF INFORMATION, INCLUDING SUGGESTIONS FOR REDUCING THIS BURDEN TO DEPT. OF DEFENSE, WASHINGTON HEADQUARTERS SERVICES, DIRECTORATE FOR INFORMATION OPERATIONS AND REPORTS, 1215 JEFFERSON DAVIS HWY., SUITE 1204, ARLINGTON, VA. 22202-4302, AND TO THE OFFICE OF MANAGEMENT AND BUDJET, PAPERWORK REDUCTION PROJECT (0704-0188), WASH. DC 20503. PLEASE DO NOT RETURN YOUR FORM TO EITHER OF THESE ADDRESSES. SEND COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT / PR NO. LISTED IN BLOCK E.

A. CONTRACT LINE ITEM NO.			EXHIBIT		C. CATEGORY:							
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CONTRACT DATA REQUIREMENTS LIST Form Approved OMB No. 0704-0188 (1 Data Item) Public reporting burden for this collection of information is estimated to average 110 hours pe response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of Send completed form to the Government Issuing Contracting Officer of the Contract/PR No. listed in Block E. A. CONTRACT LINE ITEM NO. | B. EXHIBIT C. CATEGORY: TOP TM OTHER D. SYSTEM/ITEM E. CONTRACT/PR F. CONTRACTOR 9G 1615 01-140-4061 1. DATA ITEM 2. TITLE OF DATA ITEM 3. SUBTITLE CERTIFICATION DATA / REPORTS 4. AUTHORITY (Data Acquisition 5. CONTRACT REFERENCE 6. REQUIRING OFFICE **DEFENSE SUPPLY CENTER RICHMOND** DI-MISC-80678/T3 7. DD 250 9. DIST 10. FREQUENCY 12. DATE OF FIRST DISTRIBUTION 14. REQ SUBMISSION LT SEE BLOCK 16* b. COPIES STATEMENT AS REQ **REQUIRED** 8. APP 11. AS OF DATE 13. DATE IF Final a. ADDRESSEE CODE **SUBSEQUENT** Draft AS REQ SEE BLOCK 16* Reg Repro PARA. 10.1,10.2,10.2.1,10.2.2,10.2.4,10.5 APPLY DCMC / ACO 1/0 DCMC / QAR 1/0 BLOCK#12 -UPON SUBMITTAL OF FIRST ARTICLE SAMPLE (S) PCO 1/0 AND/OR PRODUCTION LOT SAMPLE. BLOCK #3-SEPERATE REPORTS SHALL BE PROVIDED FOR THE BELOW LISTED SUB TITLES. CERTIFICATION REPORTS FOR PRIME PROCESS AND MATERIAL SPECIFICATIONS SHALL INCLUDE CERTIFICATION THAT ALL VENDORS PREFORMING THESE PROCESSES ARE PRIME (OEM) (78286) SIKORSKY AIRCRAFT APPROVED SOURCES. BLOCK #5 - CONTRACT REFERENCE: P/N: material: AMS 5617. 65664-11212-101passivate per SS 8435 65664-11212-101 penetrant insp. per SS 8806 65664-11212-102 passivate per SS 8435 65664-11212-102 Maginetic Particle Insp per SS 8805 quality grade E 65664-11212-042 furnace braze -042 assy in dry argon per AMS26666 filler material per AWS A5.8-76 Bag-8a. Brazing to be performed during solution treatment per AMS 5617 (note #1 65664-11212-042) 65664-11212-041 union carbide tungsten carbide coating per note#1 65664-11212-041 magnetic particle insp. after passivation per SS 8805

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

3/0

J. DATE

John. D. Leighty
DD Form 1423-1, JUN 90

G. PREPARED BY

Previous editions are obsolete.

I. APPROVED BY

John. D. Leighty

H. DATE